



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL  
CLIMATE ACTION

The Director-General

Brussels,  
DG Clima/JD

Ares(2016)

**NOTE FOR THE ATTENTION OF MR CHRISTIAN LEFFLER,  
DEPUTY SECRETARY GENERAL EEAS  
AND MR TUNG-LAI MARGUE, DIRECTOR FPI**

**Subject:** Reply Joint Note EEAS-FPI 'Way forward – China – Carbon Capture and Storage (CCS) project – Partnership Instrument'

Thank you for your Note dated 9.2.2016 on the above mentioned subject. DG CLIMA appreciates that FPI and EEAS consider supporting the EU's highly important cooperation with China on the issue of Carbon Capture and Storage (CCS), through the Partnership Instrument. Below I will outline DG CLIMA's commitment and guidance on the subject, as requested.

**Rationale for the project**

China has the highest total energy consumption in the world, 90% of which in the case China is fossil fuel-based. It faces an enormous task in transforming its energy mix to low-emission and low-carbon to achieve its goal of ecological security towards an Ecological Civilization, as well as its commitments under its 2015 Intended Nationally Determined Contribution for COP21 Paris.

China is the world's largest emitter of greenhouse gases. Accelerated efforts to rein in growing CO<sub>2</sub> emissions are of paramount global importance to climate change mitigation efforts. Consistent with its aim to peak its CO<sub>2</sub> emissions around 2030 or sooner if possible, the Chinese government is implementing strong measures to transform its energy to a low carbon mix. However, coal is expected to remain a main pillar of its energy supply even in the long-term. There is widespread consensus that for China to move from its current CO<sub>2</sub> emission reduction trajectory to a more ambitious one, CO<sub>2</sub> abatement from power generation and coal-based industrial production is crucial. CCS is the only currently available technology that can cut up to 90% of CO<sub>2</sub> emissions from coal-fired power plants and industries. There is a general agreement that in the case of China CCS is an essential part of a portfolio of technologies that are required to achieve effective long-term CO<sub>2</sub> mitigation and to ensure that Chinese emissions peak and keep falling after 2030. For these reasons, fostering CCS in China is of high priority for the global fight against man-made climate change, and for honouring the 2015 Paris Agreement.

## Opportunities

PI funding is an opportunity, and indeed a necessity, for the EU to honour its formal commitments<sup>1</sup> under the EU-China Near Zero Emissions from Coal initiative (NZEC). While the Chinese side has delivered on its part of the NZEC cooperation in phases I (preparation) and IIA (pre-feasibility), it is now up to the EU side to keep its promise for phase IIB (feasibility study), through the proposed project. This can be done with a financial allocation which is of a moderate dimension (7 MEUR) given the size of the CCS-challenge in China. A PI-project is an opportunity to have a huge and very cost-efficient impact on long-term climate mitigation policies in the world's biggest emitter country of greenhouse gas emissions, in view of the climate change objectives of the PI Regulation. The continuation of the CCS-cooperation with China will offer business opportunities for specialised EU-based consultancies and environmental engineering companies. For these reasons, the PI would seem like the instrument of choice to foster EU-China expert cooperation on the CCS-issue. It is to be noted that upon successful completion of a concrete CCS feasibility study, the EIB has expressed its interest to potentially re-enter the NZEC cooperation for phase III, implementation of a demonstration project.

## Risks

Your Note mentions several potential risks of a PI-project on China/CCS. The attached Concept Note, with which we propose a project of 7 MEUR from PI 2016, as well as the subsequent Action Document., will discuss appropriate mitigation strategies in greater detail. Let me briefly respond to your main concerns:

- Risk of non-completion: This risk exists but its impact is mitigated by the suggested phasing of the new project, through an early project closure option, should the results of inception not be satisfactory.
- Risks related to Tianjin/Huaneng as the pilot site as opposed to Shengli/Sinopec: The overall positive funding recommendation of your external expert (Mr. Andrew Minchener) for the Huaneng-project should be kept in mind. However, we suggest opening the CCS cooperation with China to both projects, Huaneng and Sinopec. The inception phase will determine if sufficient Chinese and international funding is available for feasibility studies for both sites, or if funding has to be limited to one of them.
- Risk relating to the funding gap: A funding gap for a feasibility study would become evident in the inception phase and would pose a very small financial risk to the Commission. A funding gap for large-scale implementation through NZEC phase III, on the other hand, might become evident only after completion of the proposed PI project. However, even in the unlikely case that phase III of NZEC would not materialise, the previous phases would still have significantly contributed to the strengthening of EU China relations on a key climate change topic, to the generation of knowledge about the feasibility of CCS development in China and beyond, and to business opportunities for EU companies.

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<sup>1</sup> Environment Council Conclusions 21 October 2009; Statement of the 12th EU-China Summit Nanjing, China, 30 November 2009; Communication by the European Commission "Demonstrating Carbon Capture and Geological Storage (CCS) in emerging developing countries: financing the EU-China Near-Zero Emissions Coal Plant (NZEC) project";

- Risk related to insufficient enabling conditions: This issue was discussed in the November 2015 Roadmap for CCS Deployment in China by the ADB and China's National Development and Reform Commission (NDRC). As this important sectorial publication describes, the commitment by the Chinese leadership for sector development has considerably risen over the last years, in the context of China's 13<sup>th</sup> 5 years programme 2016-2020 and COP21. We intend to further reduce this risk through funding for cooperation on the CCS legal framework in China as part of the new PI-project. Please also note that the UK is already working with China on CCS sector development.

- Risk of political liabilities: Given the ever-growing dangers stemming from escalating climate change, it is a prerogative for the EU to support climate action where it has the biggest impact, and not necessarily where situations offer the highest political comfort. If the EU does not go ahead with its long-promised support towards CCS demonstration in China, there is a significant risk that the EU's commitment to CCS as a technology and to climate action will be severely criticised by stakeholders and the public.

### **Structure of proposed project**

The proposed structure of the new EU China CCS project is described in the attached Concept Note. The project shall be implemented through contract with the Asian Development Bank which offers an early termination clause for the Commission, should a financial package for at least one of the two pre-selected CCS-sites not become possible during the project's inception phase.

Let me thank you and your service for the considerable effort on the China/CCS dossier so far, and express my strong hope that we will finally be able to move into the next phase of the EU-China partnership on Coal Capture and Storage.

Finally let me assure you that DG CLIMA will provide sufficient staff input in the proposed EU China CCS project to efficiently support your respective staff who will manage the project.



Jos Delbeke

Enclosed: Concept Note